

(f) A cargo tank must not be opened to the atmosphere during cargo transfer operations except as provided in paragraph (g) of this section.

(g) A cargo tank may be opened to the atmosphere for gauging or sampling while a tank vessel is connected to a vapor control system if the following conditions are met:

(1) The cargo tank is not being filled;
(2) Except when the tank is inerted, any pressure in the cargo tank vapor space is first reduced to atmospheric pressure by the vapor control system;

(3) The cargo is not required to be closed or restricted gauged by Table 151.05 of part 151 or Table 1 in part 153 of this chapter; and

(4) For static accumulating cargo, all metallic equipment used in sampling or gauging is electrically bonded to the vessel before it is put into the tank, remains bonded to the vessel until it is removed from the tank, and if the tank is not inerted, a period of 30 minutes has elapsed since loading of the tank was completed.

(h) For static accumulating cargo the initial transfer rate must be controlled in accordance with Section 7.4 of the OCIMF, International Safety Guide for Oil Tankers and Terminals, in order to minimize the development of a static electrical charge.

(i) If cargo vapor is collected by a facility that requires the vapor from the vessel to be inerted in accordance with 33 CFR 154.820(a) or (b), the oxygen content in the vapor space of each cargo tank connected to the vapor collection system must not exceed 8 percent by volume at the start of cargo transfer. The oxygen content of each tank must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage. Where tanks have partial bulkheads, the oxygen content of each area of that tank formed by each partial bulkhead must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage.

(j) If the vessel is equipped with an inert gas system, the isolation valve required by § 39.20-1(a)(6) of this part must remain closed during vapor transfer.

(k) Unless equipped with an automatic self-test and circuit monitoring

feature, each high level alarm and tank overfill alarm required by § 39.20-7 or § 39.20-9 of this part, on a cargo tank being loaded, must be tested at the tank for proper operation within 24 hours prior to the start of cargo transfer.

[CGD 88-102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990]

Subpart 39.40—Lightering and Topping-Off Operations with Vapor Balancing

§ 39.40-1 General requirements for vapor balancing—TB/ALL.

(a) Except as provided in paragraph (b) of this section, each vessel which uses vapor balancing while conducting a lightering or topping-off operation must meet the requirements of this subpart in addition to the requirements of subparts 39.10, 39.20, and 39.30 of this part.

(b) An arrangement to control vapor emissions during a lightering or topping-off operation which does not use vapor balancing must receive approval from the Commandant (G-MSO).

(c) A vapor balancing operation must not use a compressor or blower to assist vapor transfer without approval from the Commandant (G-MSO).

(d) Vapor balancing is prohibited when the cargo tanks on a vessel discharging cargo are inerted and the cargo tanks on a vessel receiving cargo are not inerted.

(e) A vessel which intends to engage in a lightering or topping-off operation while collecting cargo vapor from other than crude oil, gasoline, or benzene must receive specific approval from the Commandant (G-MSO).

[CGD 88-102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990, as amended by CGD 95-072, 60 FR 50462, Sept. 29, 1995; CGD 96-041, 61 FR 50727, Sept. 27, 1996]

§ 39.40-3 Design and equipment for vapor balancing—TB/ALL.

(a) If the cargo tanks on a vessel discharging cargo and a vessel receiving cargo are inerted, the service vessel must:

(1) Have a means to inert the vapor transfer hose prior to transferring cargo vapor; and